

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1.-18. (Cancelled)
19. (Currently Amended) A read head, comprising:
a GMR spin valve stack including at least a pinned layer, a free layer, and a stabilization layer including a pair of separated regions of patterned exchange bias material, each region of patterned exchange bias material being disposed over a respective one of opposite ends of the free layer; and
a pair of shields, one disposed on either side of the GMR spin valve stack, with one of the shields being formed to include integral side shields that substantially enclose the ~~GMR spin valve stack~~ free layer between the pair of shields.
20. (Original) A read head as defined in claim 19, wherein the GMR spin valve stack is configured to operate in a current perpendicular to plane (CPP) mode.
21. (Original) A read head as defined in claim 20, wherein the pair of shields are electrically conductive and wherein the GMR spin valve stack includes an electrode at the top thereof and an electrode at the bottom thereof.
22. (Original) A read head as defined in claim 19, wherein the GMR spin valve stack is configured to operate in a current in plane (CIP) mode.
23. (Original) A read head as defined in claim 22, further including electrically conductive leads that are in a gap formed between the pair of shields.
24. (Original) A read head as defined in claim 19, further including a layer of insulating material forming a gap between the pair of shields in the regions at either end of the GMR spin valve stack.
25. (Original) A read head as defined in claim 24, wherein the gap layer is deposited in a selfaligned process.

26. (Original) A read head as defined in claim 24, wherein the gap layer includes a portion that covers at least portions of the sides of the stack.

27. (Currently Amended) A read head, comprising:
a GMR spin valve stack including at least a pinned layer and a free layer;
a pair of shields, one disposed on either side of the GMR spin valve stack, with one of the shields being formed to include integral side shields that substantially enclose the GMR spin valve stack between the pair of shields; and
an insulated layer of permanent magnet material disposed between the shields and abutting ~~opposite ends of the GMR spin valve stack~~ free layer.

28. (Original) A read head as defined in claim 27, wherein the GMR spin valve stack is configured to operate in a current perpendicular to plane (CPP) mode.

29. (Original) A read head as defined in claim 28, wherein the pair of shields are electrically conductive and wherein the GMR spin valve stack includes an electrode at the top thereof and an electrode at the bottom thereof.

30. (Original) A read head as defined in claim 27, wherein the GMR spin valve stack is configured to operate in a current in plane (CIP) mode.

31. (Original) A read head as defined in claim 30, further including electrically conductive leads that are with the permanent magnet material in a gap formed between the pair of shields.

32. (Currently Amended) A read head as defined in claim 31, further including a layer of insulating material on either side of the permanent magnet material and conductive leads ~~to form a gap between the pair of shields in the regions~~ at either end of the GMR spin valve stack.

33. (Currently Amended) A read head as defined in claim 27, further including a ~~layer~~ pair of gap layers of insulating material, one disposed on either side of the permanent

magnet material to form a gap between the pair of shields in the regions at either end of the GMR spin valve stack.

34. (Original) A read head as defined in claim 33, wherein the gap layer is deposited in a self-aligned process.

35. (Original) A read head as defined in claim 33, wherein the gap layer includes a portion that covers at least portions of the sides of the stack.

36. (Original) A read head as defined in claim 27, wherein the ~~GMR spin valve stack~~ includes a free layer having has opposed ends and the layer of permanent magnet material abuts at least a portion of the ends of the free layer.

37. (New) A read head as recited in claim 21, wherein at least a portion of the electrode at the top of the GMR spin valve stack is located between the pair of regions of patterned exchange material.

38. (New) A read head, comprising:

a GMR spin valve stack including at least a pinned layer and a free layer;

a pair of shields, one disposed on either side of the GMR spin valve stack, with one of the shields being formed to include integral side shields that substantially enclose the free layer between the pair of shields; and

an insulated layer of permanent magnet material disposed between the shields and abutting opposite ends of the GMR spin valve stack.